

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



PCT

(43) International Publication Date
24 February 2005 (24.02.2005)

(10) International Publication Number
WO 2005/018286 A1

(51) International Patent Classification⁷: **H05B 41/02** (74) Agent: CHUNG, Seung-Whang; Rm.301, Sooam Bldg., 747-13, Banpo-dong, Seocho-ku, Seoul, 137-040 (KR).

(21) International Application Number:
PCT/KR2004/002052

(22) International Filing Date: 17 August 2004 (17.08.2004)

(25) Filing Language: Korean

(26) Publication Language: English

(30) Priority Data:
20-2003-0026511 18 August 2003 (18.08.2003) KR

(71) Applicant and

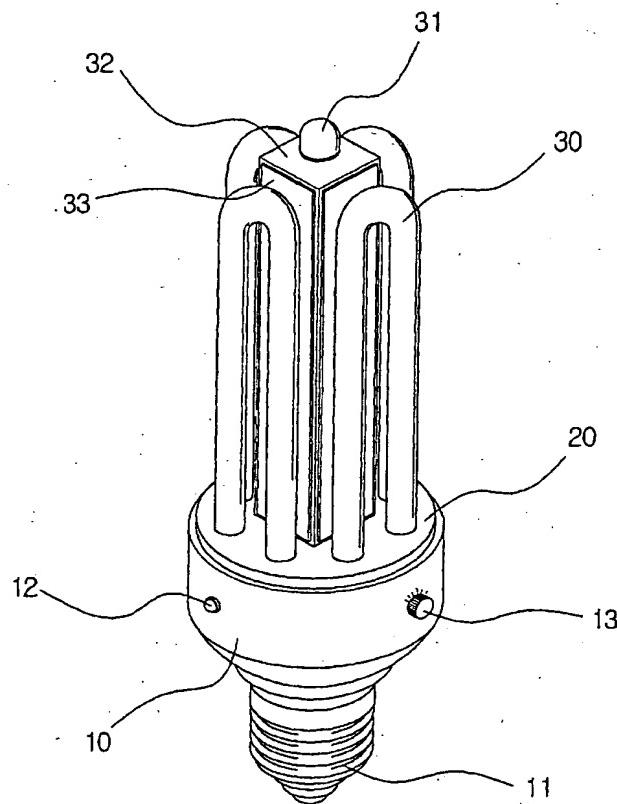
(72) Inventor: HWANG, Yoon, Kyu [KR/KR]; 105-506, Shinan-netvil apartment complex 1., 868, Banghwa-dong, Kangseo-ku, Seoul, 157-220 (KR).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,

[Continued on next page]

(54) Title: ENERGY SAVING LAMP WITH SENSOR



(57) Abstract: Disclosed is a multi-functional energy-saving fluorescent lamp in which an illumination sensor for distinguishing day and night, a timer for time control, and an infrared sensor for sensing a human are integrally provided to one lamp as a light source. The sensors measure illumination according to quantity of light or sense existence of a human. If the illumination around the lamp is lower than a certain level, e.g. at night, or a human exists, the sensors send a data signal for driving a lighting control circuit so that the lamp is automatically turned on/off. This lamp has simple structure and ensures low energy consumption. In addition, by addition of a reflection shade, heat emitted from the lamp is blocked and the illumination efficiency is improved. This lamp may be conveniently installed to any place using a socket-type light bulb without any separate sensor, thereby greatly improving convenience of a user.

WO 2005/018286 A1



SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Published:

- *with international search report*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*